CLAIMS

What is claimed is:

1   1.   A method comprising:

2   receiving input to create an interface based representation of a portion of an

3   electronic design;

4   generating a table based on the input, the table comprising a row, a first column,

5   and a second column, the row corresponding to a signal in the portion of the

6   electronic design, the first column corresponding to a first instance in the

7   portion of the electronic design, and the second column corresponding to a

8   second instance in the portion of the electronic design;

9   adding a first notation in the table at an intersection of the row and the first

10   column based on the input; and

11   adding a second notation in the table at an intersection of the row and the

12   second column based on the input, the first notation and the second notation

13   representing an interconnection between the first instance and the second

14   instance in the portion of the electronic design.

1   2.   The method of claim 1 wherein said interconnection between the first instance and

2   the second instance comprises connections between a plurality of ports of the first

3   instance and a plurality of ports of the second instance.

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1   3.   The method of claim 1 wherein one or more of said first notation and said second

2   notation comprises information indicating a direction of the interconnect between

3   the first instance and the second instance.

1   4.   The method of claim 1 further comprising:

2   receiving additional input to further define the interface based representation of

3   the electronic design;

4   adding a plurality of additional rows to the table based on the additional input,

5   each of the additional rows corresponding to one of a plurality of additional

6   signals in the portion of the electronic design;

7   adding a plurality of additional columns to the table based on the additional input,

8   each of the additional columns corresponding to one of a plurality of

9   additional instances in the portion of the electronic design; and

10   adding notations in the table at respective intersections of rows and columns to

11   represent interconnections between one or more of the first instance, the

12   second instance and one or more of the plurality of additional instances in the

13   portion of the electronic design.

1   5.   The method of claim 1 wherein the row comprises at least one cell which contains

2   a signal name of the corresponding signal.

1   6.   The method of claim 3 wherein the information indicating the direction comprises

2   one of "O", 'I', "B" or "U".

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1 7. The method of claim 4 wherein at least two of the plurality of additional columns

2   represent separate instances of a component.

1 8. The method of claim 4 further comprising adding at least one further column, each

2   of the added further columns corresponds to one of one or more signal attributes

3   for selected additional signals in the portion of the design representation.

1 9. A method comprising:

2   receiving a first interface based representation of a first portion of an electronic

3   design;

4   receiving a second interface based representation of a second portion of the

5   electronic design;

6   generating a table based on the first interface based representation of the first

7   portion of the electronic design and the second interface based

8   representation of the second portion wherein each row corresponds to a

9   signal from one or more of the first interface based representation and the

10   second interface based representation and each column corresponds to an

11   instance from one or more of the first interface based representation and the

12   second interface based representation.

1 10. The method of claim 9 further comprising receiving input to add notations in the

2   table to indicate an interconnection between one or more instances of the

3   electronic design, each instance represented by one of the plurality of columns.

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1   11. A method comprising:

2   receiving input to create an interface based representation of a portion of an

3   electronic design;

4   generating a table based on the input, the table comprising one or more rows

5   and one or more columns, each of the rows corresponding to an instance in

6   the portion of the electronic design and each of the columns corresponding to

7   a signal in the portion of the electronic design;

8   adding notations to the table, the notations representing connectivity between

9   instances represented by the one or more rows.

1   12. An apparatus comprising:

2   a storage medium having stored therein a plurality of executable instructions,

3   wherein when executed, the instructions operate the apparatus to:

4   receive input to create an interface based representation of a portion of an

5   electronic design;

6   generate a table based on the input, the table comprising a row, a first

7   column, and a second column, the row corresponding to a signal in the

8   portion of the electronic design, the first column corresponding to a first

9   instance in the portion of the electronic design, and the second

10   columns corresponding to a second instance in the portion of the

11   electronic design;

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12	add a first notation in the table at an intersection of the row and the first
13	column based on the input; and
14	add a second notation in the table at an intersection of the row and the
15	second column based on the input, the first notation and the second
16	notation representing an interconnection between the first instance and
17	the second instance in the portion of the electronic design.; and
18	at least one processor coupled to the storage medium to execute the
19	instructions.

13. The apparatus of claim 12 wherein said interconnection between the first instance and the second instance comprises connections between a plurality of ports of the first instance and a plurality of ports of the second instance.

14. The apparatus of claim 12 wherein one or more of said first notation and said second notation comprises information indicating a direction of the interconnect between the first instance and the second instance.

15. The apparatus of claim 12 wherein the instructions further operate to:

receive additional input to further define the interface based representation of the electronic design;

add a plurality of additional rows to the table based on the additional input, each of the additional rows corresponding to one of a plurality of additional signals in the portion of the electronic design;

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7   add a plurality of additional columns to the table based on the additional input,

8   each of the additional columns corresponding to one of a plurality of

9   additional instances in the portion of the electronic design; and

10   add notations in the table at respective intersections of rows and columns to

11   represent interconnections between one or more of the first instance, the

12   second instance and one or more of the plurality of additional instances in the

13   portion of the electronic design.

1   16. The apparatus of claim 12 wherein the row comprises at least one cell which

2   contains a signal name of the corresponding signal.

1   17. The apparatus of claim 14 wherein the information indicating the direction

2   comprises one of "O", 'I', "B" or "U".

1   18. The apparatus of claim 15 wherein at least two of the plurality of additional

2   columns represent separate instances of a component.

1   19. The apparatus of claim 15 wherein the instructions further operate to add at least

2   one further column, each of the added further columns corresponds to one of one

3   or more signal attributes for selected additional signals in the portion of the design

4   representation.

1   20. An apparatus comprising:

2   a storage medium having stored therein a plurality of executable instructions,

3   wherein when executed, the instructions operate the apparatus to:

4   receive a first interface based representation of a first portion of an

5   electronic design;

6   receive a second interface based representation of a second portion of the

7   electronic design;

8   generate a table based on the first interface based representation of the

9   first portion of the electronic design and the second interface based

10   representation of the second portion wherein each row corresponds to

11   a signal from one or more of the first interface based representation

12   and the second interface based representation and each column

13   corresponds to an instance from one or more of the first interface

14   based representation and the second interface based representation.

15   at least one processor coupled to the storage medium to execute the

16   instructions.

1   21. The apparatus of claim 20 wherein the instructions further operate to receive input

2   to add notations in the table to indicate an interconnection between one or more

3   instances of the electronic design, each instance represented by one of the

4   plurality of columns.

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1   22.   An apparatus comprising:

2   a storage medium having stored therein a plurality of executable instructions,

3   wherein when executed, the instructions operate the apparatus to:

4   receive input to create an interface based representation of a portion of an

5   electronic design;

6   generate a table based on the input, the table comprising one or more

7   rows and one or more columns, each of the rows corresponding to an

8   instance in the portion of the electronic design and each of the

9   columns corresponding to a signal in the portion of the electronic

10   design;

11   add notations to the table, the notations representing connectivity between

12   instances represented by the one or more rows.

13   at least one processor coupled to the storage medium to execute the

14   instructions.

1   23.   A machine accessible storage medium having stored thereon a plurality of

2   executable instructions, wherein when executed, the instructions implement a

3   method comprising:

4   receiving input to create an interface based representation of a portion of an

5   electronic design;

6   generating a table based on the input, the table comprising a row, a first column,

7   and a second column, the row corresponding to a signal in the portion of the

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8   electronic design, the first column corresponding to a first instance in the

9   portion of the electronic design, and the second columns corresponding to a

10   second instance in the portion of the electronic design;

11   adding a first notation in the table at an intersection of the row and the first

12   column based on the input; and

13   adding a second notation in the table at an intersection of the row and the

14   second column based on the input, the first notation and the second notation

15   representing an interconnection between the first instance and the second

16   instance in the portion of the electronic design.

1   24. The machine accessible storage medium of claim 23 wherein said interconnection

2   between the first instance and the second instance comprises connections

3   between a plurality of ports of the first instance and a plurality of ports of the

4   second instance.

1   25. The machine accessible storage medium of claim 23 wherein one or more of said

2   first notation and said second notation comprises information indicating a direction

3   of the interconnect between the first instance and the second instance.

1   26. The machine accessible storage medium of claim 23 wherein the instructions

2   further implement:

3   receiving additional input to further define the interface based representation of

4   the electronic design;

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5   adding a plurality of additional rows to the table based on the additional input,

6   each of the additional rows corresponding to one of a plurality of additional

7   signals in the portion of the electronic design;

8   adding a plurality of additional columns to the table based on the additional input,

9   each of the additional columns corresponding to one of a plurality of

10   additional instances in the portion of the electronic design; and

11   adding notations in the table at respective intersections of rows and columns to

12   represent interconnections between one or more of the first instance, the

13   second instance and one or more of the plurality of additional instances in the

14   portion of the electronic design.

1   27. The machine accessible medium of claim 23 wherein the row comprises at least

2   one cell which contains a signal name of the corresponding signal.

1   28. The machine accessible medium of claim 25 wherein the information indicating the

2   direction comprises one of "O", 'I',"B" or "U".

1   29. The machine accessible medium of claim 25 wherein at least two of the plurality of

2   additional columns represent separate instances of a component.

1   30. The machine accessible medium of claim 25 wherein the instructions further

2   implement adding at least one further column, each of the added further columns

3   corresponds to one of one or more signal attributes for selected additional signals

4   in the portion of the design representation.

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1   31. A machine accessible storage medium having stored therein a plurality of

2   executable instructions, wherein when executed, the instructions implement a

3   method comprising:

4   receive a first interface based representation of a first portion of an

5   electronic design;

6   receive a second interface based representation of a second portion of the

7   electronic design;

8   generate a table based on the first interface based representation of the

9   first portion of the electronic design and the second interface based

10   representation of the second portion wherein each row corresponds to

11   a signal from one or more of the first interface based representation

12   and the second interface based representation and each column

13   corresponds to an instance from one or more of the first interface

14   based representation and the second interface based representation.

15   at least one processor coupled to the storage medium to execute the

16   instructions.

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1   32. The machine accessible storage medium of claim 31 wherein the instructions

2   further implement receiving input to add notations in the table to indicate an

3   interconnection between one or more instances of the electronic design, each

4   instance represented by one of the plurality of columns.

5   33. A machine accessible storage medium having stored therein a plurality of

6   executable instructions, wherein when executed, the instructions implement a

7   method comprising:

8   receiving input to create an interface based representation of a portion of an

9   electronic design;

10   generating a table based on the input, the table comprising one or more rows

11   and one or more columns, each of the rows corresponding to an instance in

12   the portion of the electronic design and each of the columns corresponding to

13   a signal in the portion of the electronic design;

14   adding notations to the table, the notations representing connectivity between

15   instances represented by the one or more rows.

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